

21/24 - (C) WPI / Thomson

AN - 1982-D1709E [12]

AP - EP19810630050 19810826

PR - US19830456354 19830107; US19800185208 19800908

TI - Shock absorbing liner for football helmet - comprises series of parallel elastomeric tubes joined together at sides and resting on inner cushioning layer

IW - SHOCK ABSORB LINING FOOTBALL HELMET COMPRISE SERIES PARALLEL ELASTOMER TUBE JOIN SIDE REST INNER CUSHION LAYER

PA - (ATOI ) A-T-O INC

PN - EP0047712 A 19820317 DW198212 IL63556 A 19840330 DW198424 CA1171202 A 19840724 DW198434 EP0047712 B 19841031 DW198444 DE3166977G G 19841206 DW198450

IC - A42B3/00; F41H1/04

AB - The liner for a football helmet is secured to the inner surface of the helmet shell and is made up of an array of elastomeric tubes which lie parallel to each other. The tubes (15) have a circular section and are secured together side-by-side by adhesive or may be integrally formed as an extrusion. The tubes may be secured to the shell by e.g. rivets or snaps.

Each tube is open at both ends and deforms to an elliptical shape under impact. The layer of tubes is covered by a layer of cushioning material (17) which is made up of a series of foamed resin pads (19) spaced along a carrier sheet (21). The sheet is detachably

secured to the tubes by strips of hook-pile fastener or by press-studs.